

Supreme Court of the United States

OCTOBER TERM, 1995

LOTUS DEVELOPMENT CORPORATION,

Petitioner,

BORLAND INTERNATIONAL, INC., Respondent.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the First Circuit

MOTION FOR LEAVE TO FILE BRIEF AMICUS CURIAE
AND BRIEF AMICUS CURIAE OF
INTELLECTUAL PROPERTY OWNERS
IN SUPPORT OF PETITIONER

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MOTION FOR LEAVE TO FILE BRIEF AMICUS CURIAE

Intellectual Property Owners ("IPO"), a not-for-profit national organization founded in 1972 to represent the interests of owners of intellectual property in the United States, respectfully moves for leave to file the attached brief amicus curiae in this copyright infringement case. The consent of the attorney for petitioner has been obtained. The consent of the attorney for respondent was requested but refused.

Membership in IPO currently includes nearly one hundred large and mid-size companies and more than three hundred small businesses, universities, independent inventors, authors, executives and attorneys who own or are interested in patents, trademarks, copyrights and other intellectual property rights. Many of IPO's members develop computer software, either to compete in the world-wide software market, to complement the services they provide their customers, or to support other segments of their businesses.

Computer software development has become a key part of the United States economy. As with all copyright industries, it relies on appropriate levels of copyright protection for the works it creates. Because the market for computer programs is nationwide, the industry also relies on a measure of national uniformity in the application of copyright law. The First Circuit's decision below contravenes both of these important industry expectations.

The First Circuit has denied copyright protection to expression in one of the most creative elements of a computer program—the interface between the computer and the user—because that element performs a useful function. Even though copyright protection was conferred on authors of computer programs by Congress, the First Circuit's decision threatens to deny that protection to the expression of any program element that also performs a useful function.

The First Circuit's interpretation of Section 102(b) of the Copyright Act, on which it based its denial of copyright protection to the Lotus 1-2-3 user interface, conflicts with the interpretation of that provision in other circuits. This conflict subjects the works of computer program authors to flatly contradictory legal rules within a national marketplace.

This case is much more than a dispute between the parties: it is a clash between two fundamentally-opposed views of what protection the Copyright Act provides for computer software. That is why this case has attracted such extraordinary attention within the computer industry—as the ten briefs amicus curiae filed in the First Circuit attest.

One view embraces the Congress' decision that computer programs are literary works, to be afforded protection under copyright law in accordance with the same principles that apply to all copyrighted works. In this view, appropriate protection under copyright law fosters innovative competition in the software industry and ful-

fills the Constitutional dictate "to promote the progress of science and useful arts." U.S. Const. art. I, § 8, cl. 8. IPO holds this view, together with the greater part of the software industry.

The opposite view rejects Congress' decision that programs should be protected under copyright. By attempting to erect special judicial barriers to protection of computer programs, those expressing this view seek to curtail the protection that the copyright statute confers. They do so to foster imitative competition—competition founded on copying the fruits of others' innovative development.

As an association representing some of the leading innovators in the software industry, IPO is in a unique position to bring to the Court's attention the viewpoint of the major portion of the business sector that is most affected by the decision below. IPO is in a better position than the parties to assist the Court in assessing the important legal and policy implications of this case for the software industry and the copyright system. IPO's brief amicus curiae focuses on these considerations. IPO respectfully requests that its motion be granted and that its brief be considered by the Court in connection with the petitioner's request for the grant of a Writ of Certiorari.

Respectfully submitted.

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BRIEF AMICUS CURIAE OF INTELLECTUAL PROPERTY OWNERS IN SUPPORT OF PETITIONER

INTEREST OF AMICUS CURIAE

Intellectual Property Owners ("IPO") files this amicus curiae brief in support of the petition of Lotus Development Corporation ("Lotus") for a writ of certiorari to review the ruling of the United States Court of Appeals for the First Circuit.

IPO is a national organization founded in 1972 and representing the interests of owners of intellectual property in the United States. Membership in IPO currently includes nearly one hundred large and mid-size companies and more than three hundred small businesses, universities, independent inventors, authors, executives and attorneys who own or are interested in patents, trademarks, copyrights and other intellectual property rights. Members of

the Board of Directors of the association are listed in the Appendix to this brief. IPO is a non-profit association exempt from federal income tax under Internal Revenue Code § 501(c)(6).

IPO has no interest in either of the parties to this appeal or in the outcome of this appeal, other than to the extent that it affects IPO members and the public generally. Its interest is in the issues before the Court, which are of concern to IPO members, particularly those in the computer and software industries. Many of IPO's members develop computer software, either to compete in the worldwide software market, to complement the services they provide their customers, or to support other segments of their businesses.

This case presents critical issues concerning the extent to which copyright protects computer programs. The computer software industry has long relied on copyright law and the incentives it provides. Under the regime established by Congress that recognizes computer programs as literary works and accords them full protection under copyright law, software development has grown into one of the major American industries. At the same time, the United States has become the dominant force in the world software market, supplying approximately 75% of the nearly \$70 billion worldwide packaged software market in 1993 and maintaining a positive balance of trade. U.S. Dept. of Commerce, U.S. Global Trade Outlook 1995-2000: Toward the 21st Century 134-35 (1995) ("Trade Outlook"). From 1991 to 1994 the market for packaged software in the United States increased by nearly 41%, to \$35.6 billion, id., making it one of the fastest growing sectors in our national economy. U.S. Dept. of Commerce, U.S. Industrial Outlook '94, at 27-1 (1994). Employment in the software industry has risen every year

since 1988 (the first year for which such data are available), creating nearly 73,000 jobs over that period. *Trade Outlook*, at 134.

ARGUMENT

The central question in this case is whether copyright in a computer program protects the expression in the program's user interface—i.e., the element of the computer program that permits the program author to communicate with the user, and permits the user to communicate with the computer. At least three courts of appeals have held that expression in the user interface of a computer program is copyrightable.2 In the decision below,3 the First Circuit accepted the district court's finding that the user interface before it, the menu command hierarchy of the Lotus 1-2-3 spreadsheet program, contained expression, and that other ways of expressing the ideas underlying the user interface were available. 49 F.3d at 816. The court concluded that this case involves the defendant's "deliberate, literal copying of the Lotus menu command hierarchy." Id. at 814. Nonetheless, the court below found that the Lotus 1-2-3 menu command hierarchy was, in its entirety, a "method of operation." For that reason, it held that Section 102(b) of the Copyright Act, 17 U.S.C. § 102(b), deprived it of protection. 49 F.3d at 815.5

¹ One of IPO's members, International Business Machines Corporation, has recently agreed to purchase all of the outstanding shares of Lotus, a non-member.

² See infra, pp. 4-6.

³ Lotus Dev. Corp. v. Borland Int'l, Inc., 49 F.3d 807 (1st Cir.), petition for cert. filed, 63 U.S.L.W. 3892 (U.S. June 7, 1995) (No. 94-2003).

⁴ The Lotus "menu command hierarchy" is the selection of 469 commands and their hierarchical arrangement into more than 50 menus and submenus. 49 F.3d at 809. Together they comprise the heart of Lotus 1-2-3's user interface.

⁸ 17 U.S.C. § 102(b) provides:

In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system,

In the First Circuit's view, "'method of operation,' as that term is used in § 102(b), refers to the means by which a person operates something, whether it be a car, a food processor, or a computer." *Id.* Since a user interface is a "means by which a person operates . . . a computer," the court's reasoning appears to preclude protection for any user interface.

But the First Circuit's reasoning has troubling implications for all elements of computer programs-not just user interfaces-and, indeed, for computer programs as a whole. A computer program, defined in the Copyright Act as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result," is a means by which a person operates a computer. 17 U.S.C. § 101 (emphasis supplied). Virtually all elements of a program are means of operating some aspect of a computer. The First Circuit's construction of Section 102(b) might well preclude protection for all such elements, even for the literal code of programs.6 In his concurring opinion Judge Boudin, in fact, acknowledges that such a literal reading of Section 102(b) "might easily seem to exclude most computer programs from protection." 49 F.3d at 820 (Boudin, J., concurring). That result is clearly at odds with the statute, with the stated intent of Congress and with the weight of judicial authority in other circuits.

- I. THE DECISION BELOW CONFLICTS WITH DECI-SIONS OF OTHER CIRCUITS AND CREATES UNCERTAINTY AS TO COPYRIGHT PROTECTION OF COMPUTER PROGRAMS
 - A. The First Circuit's Holding on Copyrightability of User Interfaces Conflicts With Decisions of Three Other Circuits

The First Circuit's holding is flatly inconsistent with decisions on user interfaces of computer programs in other circuits. Each of the three other courts of appeals that have considered the issue has found that the user interface of a computer program is protectible by copyright. Not one court of appeals has interpreted Section 102(b) of the Copyright Act to preclude protection for the original expression contained in a user interface.

The First Circuit acknowledged that its decision conflicts directly with that of the Tenth Circuit in Autoskill, Inc. v. National Educational Support Systems, Inc., 994 F.2d 1476 (10th Cir.), cert. denied, — U.S. —, 114 S. Ct. 307 (1993). 49 F.3d at 818-19. In Autoskill, the Tenth Circuit found that aspects of the plaintiff's user interface could be protected under copyright. 994 F.2d at 1495 & n.23. The court expressly rejected the defend-

method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.

⁶ The court's effort to distinguish "computer code" from the Lotus menu command hierarchy, 49 F.3d at 816, rests on flawed reasoning. See *infra*, note 16.

⁷ We refer, of course, to expression that has not "merged" with the underlying idea. Expression is deemed to have merged with the underlying idea when there is only one way available to express the idea. See generally 3 Melville B. Nimmer and David Nimmer, Nimmer on Copyright § 13.03[B][3] (1994) (hereinafter, "Nimmer"). The court below acknowledged, 49 F.3d at 810-11, 816, that there were many alternative ways of expressing the ideas in the Lotus menu command hierarchy (thus ruling out merger), but found that to be "immaterial" to its analysis. Id. at 816.

By referring to "original expression" we exclude "scènes à faire"—stock treatments of a given subject—that, if protected at all, are protected only against wholesale appropriation. See Atari Games Corp. v. Oman, 888 F.2d 878, 886 (D.C. Cir. 1989) (R.B. Ginsburg, J.).

ant's contention, based on Section 102(b), that the means by which a user communicated with the plaintiff's program was a "'method' not protected by copyright." *Id.* at 1495 n.23.

In Apple Computer, Inc. v. Microsoft Corp., 35 F.3d 1435 (9th Cir. 1994), cert. denied, — U.S. —, 115 S. Ct. 1176 (1995), the Ninth Circuit held that the user interface of the plaintiff's computer program was entitled to copyright protection, though, in that case, only against virtually identical copying. Id. at 1439. Since the First Circuit acknowledged that the defendant below, Borland International, Inc. ("Borland") made a virtually identical copy of the menu command structure of Lotus 1-2-3, 49 F.3d at 810, but denied it any protection, the conflict between the First and Ninth Circuits is apparent.8

The Fifth Circuit, in Engineering Dynamics, Inc. v. Structural Software, Inc., 26 F.3d 1335 (5th Cir. 1994), opinion supplemented on denial of rehearing, 46 F.3d 408 (5th Cir. 1995), held that the entirety of the input and output formats that comprised the user interface of the plaintiff's program was protectible under copyright. 26 F.3d at 1343-44. That court followed Judge Keeton's holding in Lotus Development Corp. v. Paperback Software, International, 740 F. Supp. 37 (D. Mass. 1990), upon which Judge Keeton based much of his reasoning in the district court decisions in this case. E.g., Lotus Dev. Corp. v. Borland Int'l, Inc., 788 F. Supp. 78, 89-90 (D. Mass. 1992), rev'd, 49 F.3d 807 (1st Cir.), petition for cert. filed, 63 U.S.L.W. 3892 (U.S. June 7, 1995) (No. 94-2003).

B. Applied to Computer Programs, the First Circuit's Interpretation of 17 U.S.C. Section 102(b) Conflicts With Decisions of at Least Five Other Circuits

By erecting Section 102(b) as a barrier to deny protection to original expression in computer programs, the First Circuit has set itself in conflict with all circuits that have considered the application of that provision to computer software.

In Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240 (3d Cir. 1983), eert. dismissed, 464 U.S. 1033 (1984), the Third Circuit rejected a defendant's claim that Section 102(b) deprives operating system programs (the programs that control the basic functions of a computer, such as the storage and retrieval of information from a magnetic disk) from copyright protection because they implement methods, processes, ideas and systems. Id. at 1251-52.9

In M. Kramer Manufacturing Co. v. Andrews, 783 F.2d 421 (4th Cir. 1986), the Fourth Circuit reversed the district court's holding that plaintiff's computer video game (a type of computer program) was not copyrightable under Section 102(b). The district court's premise had been that plaintiff's work was "a 'system or manner of playing a game' or 'description of a game' and was simply an 'idea '" Id. at 434. The Fourth Circuit held the reliance on Section 102(b) to be "unwarranted" because it failed to recognize "the limited purpose of the subsection itself as stated in its legislative history," id.,

⁸ The First Circuit also recognized that its holding conflicted with what it described as Ninth Circuit dicta in Brown Bay Software v. Symantec Corp., 960 F.2d 1465 (9th Cir.), cert. denied, — U.S. —, 113 S. Ct. 198 (1992), 49 F.3d at 819 n.14.

The Third Circuit also concluded that the desire to achieve compatibility with a competitor's product does not permit distorting the merger doctrine in order to justify a taking of copyrighted expression. Apple v. Franklin, 714 F.2d at 1253. The First Circuit, by contrast, posited Borland's desire to achieve keystroke compatibility with Lotus 1-2-3 as a further ground for its decision that Lotus' menu command hierarc's was unprotectible, justifying Borland's wholesale taking. 49 F.3d at 817-18.

simply to restate the dichotomy between idea and expression. Id. at 434-35.

In holding that "methods of operation are not limited to mere abstractions," the decision below conflicts with the Second Circuit's decision in Computer Associates International, Inc. v. Altai, Inc., 982 F.2d 693 (2d Cir. 1992). In Altai, the Second Circuit implemented what it described as Section 102(b)'s "fundamental principle . . . that a copyright does not protect an idea, but only the expression of the idea," id. at 703, by employing an "abstractions" test as the first step of its infringement analysis.10 Id. at 706. Altai applied that test, enunciated by Learned Hand in Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1930), cert. denied, 282 U.S. 902 (1931), to separate protectible expression from unprotectible ideas and other abstractions, for "the purpose of defining the scope of plaintiff's copyright." Altai, 982 F.2d at 707 (internal quotes and citation omitted). In contrast to the First Circuit, the Second Circuit did not employ Section 102(b) as a barrier to deny protection to expression embodying ideas and other unprotectible matter. By abstracting, it was able to consider the "core of protectible material" that was separable from matter unprotectible under that section.

The First Circuit's conflict with the Second Circuit's Altai decision places it in conflict with those other circuits that have adopted some formulation of an abstractions test. See, e.g., Engineering Dynamics, 26 F.3d at 1342-43; Gates Rubber Co. v. Bando Chem. Indus., Ltd., 9 F.3d 823, 834 (10th Cir. 1993). See also, Atari Games

Corp. v. Nintendo of America, Inc., 975 F.2d 832, 839 (Fed. Cir. 1992) (approving the Altai test in dicta).

C. A Conflict in Rules of Copyrightability Leaves Program Authors Uncertain of Their Rights and Discourages Creation of Computer Programs

In the wake of the First Circuit's decision, there is a profound variation among the circuits in the legal standards governing copyright protection of computer programs. The resulting uncertainty will have a significant adverse impact on the software industry.

The software industry depends on copyright law. Innovation drives the industry, and copyright law provides both the necessary incentive for that innovation and the primary means of protecting the works that result from it. Copyright lies at the very heart of the creative endeavor of software development. And the question of what is copyrightable and what is not lies at the very heart of copyright law.

Moreover, the market for software is not regional, but national (and international). Packaged software such as Lotus 1-2-3 and Quattro Pro (the programs at issue here) is advertised and promoted nationally, and is marketed—directly, through mail-order houses, and through chains of retail stores—in every state in the United States.

As a consequence of these two factors, the First Circuit's decision subjects the industry's primary assets to the uncertainty of flatly contradictory legal rules in the marketplace. A software developer cannot know whether, or to what extent, its investments in creative expression will be protected. Such protection is subject to the vagaries of forum and venue. All that is certain is that the question will arise in the lower courts in every case of alleged copyright infringement involving computer programs.

Software development is expensive. Billions of research and development ("R&D") dollars ride on the disposition

¹⁰ The court below stated that its "initial inquiry is not whether the Lotus menu command hierarchy incorporates any expression," 49 F.3d at 816, but recognized that "the Altai test would contemplate this being the initial inquiry." Id. at 816 n.12. It further acknowledged its conflict with the Second Circuit by criticizing Altai's test because it "may actually be misleading... in instructing courts to abstract the various levels..." Id. at 815.

of these issues. Developers will not risk such substantial sums for the time and talent of creative programmers without assurance of sufficient legal protection for the fruits of that investment. Yet developers are now threatened with precisely that risk. There is no way of predicting whether a program or any element of a program will be protected. This uncertainty makes investment of R&D resources in innovative software development an unreasonably risky wager, and will likely force some to invest those resources in other endeavors.

The reverse side of this uncertainty is that software developers cannot predict where the boundaries of permissible copying lie. A program that infringes in Texas may not infringe in Massachusetts. Uncertainty on such fundamental matters defeats the goal of a uniform national copyright law. See H.R. Rep. No. 1476, 94th Cong., 2d Sess., at 129-30 (1976) (the "House Report"), reprinted in 1976 U.S.C.C.A.N. 5659, 5745-46 (discussing importance of the goal of a uniform national copyright law, as espoused by the Framers of the Constitution).

Moreover, the decision creates uncertainty in an area of law where decisions in the courts of appeals had been converging. Departing from this trend toward coherence and consensus, the First Circuit has unsettled what had appeared to be settled, and created unnecessary uncertainty about the legal rules that apply to a key national industry.

II. THE DECISION BELOW DENIES COMPUTER PROGRAMS THE COPYRIGHT PROTECTION MANDATED BY CONGRESS AND DIMINISHES THE STATUTORY INCENTIVES TO CREATE THEM

In holding that the district court erred by limiting "Lotus 1-2-3's 'method of operation' to an abstraction," 49 F.3d at 816, the First Circuit erected Section 102(b) of the Copyright Act as an initial barrier, denying protection to certain categories of works, or elements of works,

regardless of their expressive content. The Copyright Act does not read that way, Congress did not intend it to be read that way, and no other court of appeals has read it that way.

The First Circuit's misreading is a direct result of its failure to follow the holdings of this Court and employ appropriate methods of statutory interpretation. As applied to computer programs the First Circuit's holding is not membry wrong: it defeats Congress' clear mandate that computer programs be protected under copyright. The decision departs so substantially from settled copyright law, from accepted means of statutory construction, and from the clearly-stated will of Congress, as to call for an exercise of this Court's power of supervision over the lower Federal Courts.

A. The First Circuit Misinterpreted a Key Provision of the Copyright Act Because It Failed to Employ Appropriate Means of Statutory Construction

Without citing any authority for its conclusion, the court below determined that "method of operation," as that term is used in § 102(b), refers to the means by which a person operates something, whether it be a car, a food processor, or a computer." 49 F.3d at 815. According to the court, anything that falls within that definition is wholly deprived of copyright protection, even to the extent that it contains creative expression. *Id.* at 815-19.

But a court should interpret a statutory provision in light of "the provisions of the whole law, and . . . its object and policy," Kelly v. Robinson, 479 U.S. 36, 43 (1986) (citations and internal quotations omitted), as revealed by the statutory text and legislative history. The First Circuit failed utterly to do this. Without so much as a sideways glance, the First Circuit looked at Section 102(b) in isolation and proffered an interpretation of

the provision that undoes what Congress did elsewhere in the statute.¹¹

Congress' inclusion of a definition of "computer program" in Section 101 is, in itself, persuasive evidence of Congress' mandate that computer programs be counted among the "works of authorship" protected under Section 102(a). The legislative history of the Copyright Act confirms that they are.

The Copyright Act of 1976 culminated more than three decades of consideration and debate by Congress. Congress considered many different viewpoints presented in testimony, written submissions, and studies. Protection of computer programs figured prominently in these proceedings, 12 particularly after the Copyright Office—the agency charged with determining that a work sought to be registered is copyrightable subject matter—began issuing registrations for claims of copyright in computer programs in 1964. Final Report of the National Commission on New Technological Uses of Copyrighted Works, 15 (1978) ("CONTU Final Report").

Still, Congress sought further input and constituted a panel of experts, the National Commission on New Technological Uses of Copyrighted Works ("CONTU"), to study and make recommendations concerning, inter alia, the proper regime for protecting computer programs. Pub. L. No. 93-573 (1974). The Copyright Act was enacted before CONTU's study was complete. However, the committee report that Congress prepared when deliberating on the Copyright Act 13 states plainly that computer programs are among the literary works protected by Section 102(a)(1) of the statute:

The term "literary works" does not connote any criterion of literary merit or qualitative value: it includes catalogs, directories, and similar factual, reference, or instructional works and compilations of data. It also includes computer data bases, and computer programs to the extent that they incorporate authorship in the programmer's expression of original ideas, as distinguished from the ideas themselves.

House Report, at 54, reprinted in 1976 U.S.C.C.A.N. at 5667.

CONTU took testimony and written submissions from numerous experts in copyright and information technology. CONTU Final Report, at 113-14, 121-29. After consideration and debate, CONTU concluded that copyright should protect computer programs to the same degree as, and under the same principles that apply to, other copyrighted works. CONTU Final Report, at 11-14. In 1980 Congress adopted CONTU's recommendations with immaterial changes—including CONTU's proposed

¹¹ The canon that a court "construe[s] a statutory term in accordance with its ordinary or natural meaning," FDIC v. Meyer, 510 U.S. —, 114 S. Ct. 996, 1001 (1994), should not be applied to a single phrase in isolation in a way that defeats other provisions of the statute.

¹² See, e.g., Copyright Law Revision: Hearings on H.R. 4347, H.R. 5580, H.R. 6831 and H.R. 6835 before Subcomm. No. 3 of the House Comm. on the Judiciary, 89th Cong., 1st Sess. 1144-50 (Statement of John F. Banzhaf III), 1898-99 (letter from Graham W. McGowan to Hon. Edwin E. Willis, House Judiciary Committee), 1428, 1443, 1446-48, (statement of Bella L. Linden), 1472 (statement of Howard A. Meyerhoff), 1565 (statement of Fred S. Siebert) (1965); 5 House Comm. on the Judiciary, Copyright Law Revision 62-63 (testimony of Morton David Goldberg), 271 (statement of H. R. Mayers) (Comm. Print 1965) (1964 Revision Bill with Discussions and Comments); Copyright Law Revision: Hearings Pursuant to S. Res. 37 on S. 597 before the Subcomm. on Patents, Trademarks, and Copyrights of the Senate Comm. on the Judiciary, 90th Cong., 1st Sess. 192-201 (1967) (testimony and statement of Prof. Arthur R. Miller).

¹⁸ See Gustafson v. Alloyd Co., — U.S. —, 115 S. Ct. 1061, 1072 (1995) ("If legislative history is to be consulted, it is preferable to consult the documents prepared by Congress when deliberating.").

definition of "computer program." ¹⁴ Pub. L. No. 96-517, 94 Stat. 3015, 3028 (1980).

Under the First Circuit's construction of Section 102(b), however, it is questionable whether any protection remains for computer programs. Notwithstanding the court of appeals' unpersuasive attempt to limit the reach of its holding, its interpretation of Section 102(b) conflicts directly with Congress' intent that computer programs be protected by copyright.

The phrase "method of operation" is not defined in the Copyright Act. The court below, presumably adopting what it viewed as the common use of those words, 49 F.3d at 821 (Boudin, J., concurring), constructed a definition similar to that adopted by Congress for a "computer program" in Section 101. On its face, that construction must be wrong. It cannot be presumed that Congress intended to adopt for uncopyrightable matter a definition that has essentially the same meaning as the statutory definition of a protectible work of authorship—namely, a computer program.¹⁷

But even assuming that the First Circuit's definition were defensible, that would not be dispositive of the question whether the manner in which a "method of operation" is expressed is copyrightable. Nothing in Section 102(b) states or even suggests that expression that is separable from (i.e., is not merged with) a "method of operation" is uncopyrightable. Separating a method of operation from expression is analytically no different from separating ideas (another category listed in Section 102(b)) from expression.¹⁸

The First Circuit not only failed to consider the whole statute, but even failed to consider the whole subsection.

¹⁴ As this brief chronology demonstrates, copyright protection for computer programs is neither an historical accident, nor an impulsive act that received little attention by the legislators. Copyright protection for computer programs is the result of decades of open debate and careful consideration.

¹⁵ See supra, p. 3.

¹⁶ The First Circuit's attempt to limit its holding by distinguishing "computer code" from the Lotus menu command hierarchy is based on flawed and unpersuasive reasoning. The court stated that the menu command hierarchy of Lotus 1-2-3 was a method of operation because "[w]ithout the menu command hierarchy, users would not be able to access and control, or indeed make use of, Lotus 1-2-3's functional capabilities." 49 F.3d at 815 (emphasis supplied). On the other hand, the code of Lotus 1-2-3 is not a method of operation because, in order for a competing program "to offer the same capabilities as Lotus 1-2-3 [a competitor does not | have to copy Lotus' underlying code" Id. at 816 (emphasis supplied). The court asked a different question regarding the menu command hierarchy (whether it was needed to operate a particular program—Lotus 1-2-3) than it asked regarding code (whether the particular code was needed to offer the same capabilities as Lotus 1-2-3). Had it applied to the user interface the same standard it applied to the code, the Court of Appeals would have found the menu command hierarchy copyrightable, since a program offering the same capabilities as Lotus 1-2-3 could have a different menu command hierarchy, as the district court found. By the same token, had it applied to the program code the same standard it applied to the user interface, it would have recognized the flaw in its reasoning. The code of Lotus 1-2-3 is necessary to operate Lotus 1-2-3, as the code of any program is necessary to operate that particular program, making the code-under the First Circuit's reasoning—an unprotectible method of operation.

¹⁷ See 1 Nimmer, at § 2.03[E]; Jane C. Ginsburg, Four Reasons and a Paradox: The Manifest Superiority of Copyright over Sui Generis Protection of Computer Software, 94 Colum. L. Rev. 2559, 2570 (1994) ("[S]ince we know that Congress did determine in 1980 to protect computer programs, the terms 'process,' 'system,' or 'method of operation' must not be understood literally." (footnote omitted)).

¹⁸ The fallacy of the First Circuit's construction is illustrated by substituting "idea" for "method of operation." "Idea" can be defined as "a formulated thought or opinion." Webster's Ninth New Collegiate Dictionary 597 (1987). Therefore (following the First Circuit's logic) any element of a work that fits that definition is unprotectible, no matter how expressed. That interpretation would, of course, disqualify most writings from copyright protection.

Section 102(b) denies protection to "any idea, procedure, process, system, method of operation, concept, principle, or discovery . . . " 17 U.S.C. § 102(b). The presence of "idea" at the head of this list of unprotectible matter itself strongly suggests that Congress intended Section 102(b) to restate the "idea expression" dichotomy, first enunciated by the Court in Baker v. Selden, 101 U.S. 99 (1879). Absent merger (another principle that owes its origin to Baker), the idea expression dichotomy does not deny protection to expression in a work. The same is true of each of the other items listed in Section 162(b).

Again, the legislative history of the Copyright Act confirms this reading:

Section 102(b) is intended, among other things, to make clear that the expression adopted by the programmer is the copyrightable element in a computer program, and that the actual processes or methods embodied in the program are not within the scope of the copyright law.

Section 102(b) in no way enlarges or contracts the scope of copyright protection under the present law. Its purpose is to restate, in the context of the new single Federal system of copyright, that the basic dichotomy between expression and idea remains unchanged.

House Report, at 57, 1976 U.S.C.C.A.N. at 5670. See also id. at 54, 1976 U.S.C.C.A.N. at 5667 (computer programs are protectible under Section 102(a)(1) "to the extent that they incorporate authorship in the programmer's expression . . . as distinguished from the ideas themselves.").

Implementing Congress' express statement in the legislative history of the Copyright Act, courts of appeals have universally found Section 102(b) to be a restatement of the idea expression dichotomy. See, e.g., CCC Info. Servs., Inc. v. Maclean Hunter Mkt. Reports, Inc., 44 F.3d 61, 69 & n.12 (2d Cir. 1994), petition for cert. filed, 63 U.S.L.W. 3892 (U.S. June 7, 1995); Whelan Assocs., Inc. v. Jaslow Dental Lab., Inc., 797 F.2d 1222, 1234 (3d Cir. 1986), cert. denied, 479 U.S. 1031 (1987); M. Kramer Mfg. Co., Inc. v. Andrews, 783 F.2d 421, 434 (4th Cir. 1986); Kepner-Tregoe, Inc. v. Leadership Software, Inc., 12 F.3d 527, 533 & n.8 (5th Cir.), cert. denied, — U.S. —, 115 S. Ct. 82 (1994); Robert R. Jones Assocs., Inc. v. Nino Homes, 858 F.2d 274, 277 (6th Cir. 1988); Toro Co. v. R & R Prods. Co., 787 F.2d 1208, 1211-12 (8th Cir. 1986); Apple Computer, Inc. v. Microsoft Corp., 35 F.3d 1435, 1443 & n.11 (9th Cir. 1994); Autoskill Inc. v. National Educ. Support Sys., Inc., 994 F.2d 1476, 1495 (10th Cir. 1993); Cable Home Communication Corp. v. Network Prods., Inc., 902 F.2d 829, 842-43 (11th Cir. 1990). See also, Atari, Inc. v. North American Philips Consumer Elecs. Corp., 672 F.2d 607, 615 (7th Cir.) ("The Copyright Act of 1976 codifies this idea-expression dichotomy. 17 U.S.C. § 102(b)"), cert. denied, 459 U.S. 880 (1982).

B. Denying Protection to Expression in Computer Programs Erodes Severely the Incentives Congress Enacted for Their Authors

The Constitution grants Congress the power "To Promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive

The final phrase of Section 102(b) ("regardless of the form in which it is described, explained, illustrated, or embodied in such work") also supports the interpretation of that provision as a statement of the idea/expression dichotomy. The statutory language clearly contemplates that ideas, procedures, processes and the like are separable from the form in which they are "described, explained, illustrated, or embodied" Thus a dichotomy exists between the unprotectible matter and its "form" or expression.

²⁰ See Arthur R. Miller, Copyright Protection for Computer Programs, Databases, and Computer Generated Works: Is Anything New Since CONTU?, 106 Harv. L. Rev. 977, 986 (1993) ("Since Baker, courts have reaffirmed repeatedly that functionality poses no per se bar to copyrightability.") (the author was a member of CONTU who served on its software subcommittee).

Right to their respective Writings and Discoveries," U.S. Const., art. I, § 8, cl. 8. It thus establishes both the underlying goal of copyright law (to promote the progress of science (knowledge)) and the mechanism for achieving that goal (granting authors exclusive rights for a limited period of time).

The Court has confirmed that the public good is served by providing authors with these exclusive rights as an incentive to create works of authorship:

The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in "Science and useful Arts." Sacrificial days devoted to such creative activities deserve rewards, commensurate with the services rendered.

Mazer v. Stein, 347 U.S. 201, 219 (1954).

The computer software industry relies on these incentives, and they have caused the industry to flourish and grow. Any fundamental alteration in the balance of these incentives, as in the decision below, will have a substantial and detrimental effect on the industry.

Software development (including user interface design)²¹ requires a substantial investment in creative expression—the very creativity that the conomic incentives in the Copyright Act are designed to protect and nurture. Eliminating copyright protection for programs or expressive elements of programs undermines those incentives to innovate.²² Even casting substantial doubt on the avail-

ability and extent of such protection stifles progress and creativity, and disserves the goals of the Copyright Act.20

C. The First Circuit's Construction of Section 102(b)
Is Such a Significant Departure From That of the
Overwhelming Majority of Courts of Appeals and
District Courts as to Call for an Exercise of This
Court's Power of Supervision

The First Circuit's approach to Section 102(b) of the Copyright Act is a substantive and jurisprudential anomaly. The Court of Appeals, considering itself to be "navigating in uncharted waters," 49 F.3d at 813, weighed anchor and set itself adrift doctrinally. The court failed to follow the course that Congress charted for the judiciary in the Copyright Act and its legislative history. It ignored the overwhelming number of other courts that have recognized Section 102(b) as a restatement of the idea/expression dichotomy. And in so doing it reached

court observed: "Few companies are going to invest the time and resources to develop new programs if their products can be freely duplicated by anyone. Such 'competitors,' who could undersell the originator simply because they don't have its development costs, would destroy the market which any innovator needs to recoup his investment."

²³ This is so despite the First Circuit's mistaken belief that its holding would foster progress in the sofeware development industry. 49 F.3d at 817-18. The First Circuit was obliged to abide by the balance struck by Congress in establishing the scheme of incentives for authors. This Court's admonition to another court of appeals is appropriate in this instance as well:

We agree with the Court of Appeals that copyright is intended to increase and not impede the harvest of knowledge. But we believe the Second Circuit gave insufficient deference to the scheme established by the Copyright Act for fostering the original works that provide the seed and substance of this harvest. The rights conferred by copyright are designed to assure contributors to the store of knowledge a fair return for their labors.

Harper & Row, Publishers v. Nation Enters., 471 U.S. 539, 545-46 (1985) (citation omitted).

²¹ As the most visible element of a computer program, the user interface is also the most easily placed. Excluding this important programming element from protection will inevitably lead to more unauthorized copying.

²² In Apple Computer, Inc. v. Formula Int'l, Inc., 562 F. Supp. 775, 783 (C.D. Cal. 1983), aff'd, 725 F.2d 521 (9th Cir. 1984), the

erroneous conclusions that subvert the goals of the Copyright Act and jeopardize the ability of a critical industry to continue its significant contributions to our nation's economy.

The issues raised in this case are as ubiquitous as they are important. The question of copyrightability arises in all copyright infringement cases, and is central to many. The substantial degree to which the First Circuit has lost its way in this case calls for an exercise of the Court's power of supervision over the federal judiciary. Cf. Florida v. Rodriguez, 469 U.S. 1, 7 (1984) (Stevens, J., dissenting) ("As the Court of last resort in the federal system, we have supervisory authority and therefore must occasionally perform a pure error-correcting function in federal litigation.").

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

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APPENDIX

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